

L5 ANSWER 2 OF 7 AGRICOLA
AN 96:35723 AGRICOLA
DN IND20516814
TI Transgenic barley (*Hordeum vulgare* L.) by **electroporation** of
protoplasts.
AU Salmenkallio-Marttila, M.; Aspegren, K.; Akerman, S.; Kurten, U.;
Mannonen, L.; Ritala, A.; Teeri, T.H.; Kauppinen, V.
CS VTT Biotechnology and Food Research, Espoo, Finland.
AV DNAL (QK725.P54)
SO Plant cell reports, 1995. Vol. 15, No. 3/4. p. 301-304
Publisher: Berlin, W. Ger. : Springer International.
CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references
CY Germany
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L5 ANSWER 3 OF 7 AGRICOLA
AN 94:52219 AGRICOLA
DN IND20404563
TI Transformation of maize (*Zea mays* L.) protoplasts and regeneration of
haploid transgenic **plants**.
AU Sukhapinda, K.; Kozuch, M.E.; Rubin-Wilson, B.; Ainley, W.M.; Merlo, D.J.
AV DNAL (QK725.P54)
SO Plant cell reports, 1993. Vol. 13, No. 2. p. 63-68
Publisher: Berlin, W. Ger. : Springer International.
CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references
CY Germany
DT Article
FS Non-U.S. Imprint other than FAO
LA English

QK 725- . P555

L7 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 2001:178390 CAPLUS
DN 134:219379
TI Induction of embryogenesis from plant microspores
IN Simmonds, Daina H.; Newcomb, William; Zhao, Jiping; Gervais, Carmen
PA Canada, Minister of Agriculture and Agri-Food, Can.
SO U.S., 17 pp., Cont.-in-part of U.S. 5,900,375.
CODEN: USXXAM

DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6200808	B1	20010313	US 1999-299107	19990426
	CA 2145833	AA	19960930	CA 1995-2145833	19950329
	US 5900375	A	19990504	US 1996-623523	19960329
PRAI	CA 1995-2145833	A	19950329		
	US 1996-623523	A2	19960329		

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 57 AGRICOLA
AN 2001:53457 AGRICOLA
DN IND23216204

TI **Electroporation** modulates the embryogenic responses to asparagus
(Asparagus officinalis L.) microspores.

AU Delaitre, C.; Ochatt, S.; Deleury, E.

AV DNAL (442.8 P94)

SO Protoplasma, 2001. Vol. 216, No. 1/2. p. 39-46
Publisher: Wien : Springer-Verlag.

CODEN: PROTA5; ISSN: 0033-183X

NTE Includes references

CY Austria

DT Article

FS Non-U.S. Imprint other than FAO

LA English

L7 ANSWER 18 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2002:65513 BIOSIS

DN PREV200200065513

TI Plant transformation by gene transfer into **pollen**.

AU Saunders, J. A.; Matthews, B. F.

CS Dayton, Md. USA

ASSIGNEE: THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF
AGRICULTURE

PI US 5629183 May 13, 1997

SO Official Gazette of the United States Patent and Trademark Office Patents,
(May 13, 1997) Vol. 1198, No. 2, pp. 1117.
ISSN: 0098-1133.

DT Patent

LA English

L7 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2002 ACS

AN 1997:11478 CAPLUS

DN 126:70744

TI **Pollen** and embryo electro-transformation: developing a novel
technique to introduce genes into maize

AU Tsengwa, Nombasa

CS Univ. of Maryland, College Park, MD, USA

SO (1996) 125 pp. Avail.: Univ. Microfilms Int., Order No. DA9637734
From: Diss. Abstr. Int., B 1997, 57(7), 4214

DT Dissertation

LA English

L7 ANSWER 22 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1996:343800 BIOSIS

DN PREV199699066156

TI Transgenic plants: Production and application on the use of microspores/

pollen for genetic modification.

AU Malik, C. P.; Ahuja, Ishita; Thind, Sanjeev K.; Bhatia, D. S.

CS Dep. Botany, Punjab Agric. Univ., Ludhiana 141004 India

SO Malik, C. P. [Editor]. Advances in Pollen-Spore Research, (1996) Vol. 21, pp. 165-220. Advances in Pollen-Spore Research; Pollen-spore research: Emerging strategies.

Publisher: Today and Tomorrow's Printers and Publishers 24 B/5 Deshbandhu Gupta Road, Karol Bagh, New Delhi, India.

ISSN: 0376-480X. ISBN: 1-55528-279-2, 81-7019-422-9.

DT Book

LA English

L7 ANSWER 24 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 2

AN 1997:110627 BIOSIS

DN PREV199799409830

TI Exine-detached pollen of Nicotiana tabacum as an electroporation target for gene transfer.

AU Shi Hua-Zhong, Wang Jin (1); Yang Hong-Yuan; Zhou Chang (1); Chen Zheng-Hua

CS (1) Lab. Plant Reprod. Biol., Coll. Life Sci., Wuhan Univ., Wuhan 430072 China

SO Acta Botanica Sinica, (1996) Vol. 38, No. 8, pp. 626-630.

ISSN: 0577-7496.

DT Article

LA Chinese

SL Chinese; English

L7 ANSWER 26 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1995:464777 BIOSIS

DN PREV199598479077

TI Methods in Molecular Biology, Vol. 55. Plant cell electroporation and electrofusion protocols.

AU Nickoloff, Jac A. [Editor]

CS Harvard Univ., Boston, MA USA

SO Nickoloff, J. A. [Editor]. Methods in Molecular Biology, (1995) Vol. 55, pp. xiv+205p. Methods in Molecular Biology; Plant cell electroporation and electrofusion protocols.

Publisher: Humana Press Inc. Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA.

ISSN: 0097-0816. ISBN: 0-89603-328-7.

DT Book; (MANUAL)

LA English

L7 ANSWER 29 OF 57 AGRICOLA

DUPLICATE 4

AN 95:51682 AGRICOLA

DN IND20475182

TI Rapid optimization of electroporation conditions for plant cells, protoplasts, and pollen.

AU Saunders, J.A.; Lin, C.H.; Hou, B.H.; Cheng, J.; Tsengwa, N.; Lin, J.J.; Smith, C.R.; McIntosh, M.S.; Van Wert, S.

CS SARL, USDA, ARS, Beltsville, MD.

AV DNAL (TP248.13.M65)

SO Molecular biotechnology, June 1995. Vol. 3, No. 3. p. 181-190

Publisher: Totowa, NJ : Humana Press, c1994-

CODEN: MLBOEO; ISSN: 1073-6085

NTE Includes references

CY New Jersey; United States

DT Article

FS U.S. Imprints not USDA, Experiment or Extension

LA English

L7 ANSWER 30 OF 57 AGRICOLA

DUPLICATE 5

AN 95:57206 AGRICOLA

DN IND20479306

TI Introduction of impermeable molecules into pollen grains by electroporation.

AU Obermeyer, G.; Weisenseel, M.H.

CS Universitat Salzburg, Salzburg.

AV DNAL (442.8 P94)
SO Protoplasma, 1995. Vol. 187, No. 1/4. p. 132-137
Publisher: Wien : Springer-Verlag.
CODEN: PROTA5; ISSN: 0033-183X

NTE Includes references
CY Austria
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L7 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1995:882330 CAPLUS
DN 123:310231
TI **Pollen** electrotransformation in tobacco
AU Saunders, James A.; Matthews, Benjamin F.
CS Plant Sci. Inst., ARS, Beltsville, MD, USA
SO Methods in Molecular Biology (Totowa, NJ, United States) (1995), 55, 81-8
CODEN: MMBIED; ISSN: 1064-3745
DT Journal; General Review
LA English

L7 ANSWER 33 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1994:191436 BIOSIS
DN PREV199497204436
TI Analysis of transformed plants produced by **pollen**
electrotransformation.
AU Saunders, James A.; Smith, Camelia R.; Cheng, Jianping
CS SARC, Plant Sci. Inst., USDA/ARS, Beltsville, MD 20705 USA
SO Journal of Cellular Biochemistry Supplement, (1994) Vol. 0, No. 18 PART A,
pp. 101.
Meeting Info.: Keystone Symposium on Improved Crop and Plant Products
Through Biotechnology Keystone, Colorado, USA January 9-16, 1994
ISSN: 0733-1959.
DT Conference
LA English

L7 ANSWER 35 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
7
AN 1994:159810 BIOSIS
DN PREV199497172810
TI Transient GUS gene expression in *Brassica napus* **electroporated**
microspores.
AU Jardinaud, Marie-Francoise; Souvere, Andre (1); Alibert, Gilbert
CS (1) Lab. Biotechnologie, Amelioration Plantes, EA, Dred 832 INP, Ensat.
145 Muret, F-31076 Toulouse Cedex France
SO Plant Science (Limerick), (1993) Vol. 93, No. 1-2, pp. 177-184.
ISSN: 0168-9452.
DT Article
LA English

L7 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1996:166918 CAPLUS
DN 124:221810
TI Methods for gene transfer in plants using electrical manipulation,
successes and failures
AU Saunders, James A.; Smith, Camelia R.; Cheng, Jianping; Matthews, Benjamin
F.; O'Neill, Nichole R.
CS Plant Sciences Institute, USDA/ARS, Beltsville, MD, 20705, USA
SO Applications of Plant In Vitro Technology, Proceedings of the
International Symposium, Serdang, Malay., Nov. 16-18, 1993 (1993), 26-42.
Editor(s): Shamann, Nor Aripin. Publisher: Universiti Pertanian Malaysia,
Dep. of Biochemistry and Microbiology, Serdang, Malay.
CODEN: 62MEAQ
DT Conference; General Review
LA English

L7 ANSWER 39 OF 57 AGRICOLA
AN 93:12694 AGRICOLA
DN IND93002372

DUPLICATE 8

TI Electroporation and PEG delivery of DNA into maize microspores.
AU Fennell, A.; Hauptmann, R.
CS Northern Illinois University, DeKalb, IL
AV DNAL (QK725.P54)
SO Plant cell reports, 1992. Vol. 11, No. 11. p. 567-570
Publisher: Berlin, W. Ger. : Springer International.
CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references.
DT Article
FS Non-U.S. Imprint other than FAO
LA English

QK 725 . P555

L7 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1992:484270 CAPLUS
DN 117:84270
TI Successful gene transfer in plants using **electroporation** and
electrofusion
AU Saunders, James A.; Van Wert, Sally L.; Smith, Camelia Rhodes; Matthews,
Benjamin F.; Sinden, Stephen
CS Beltsville Agric. Res. Cent., Plant Sci. Inst., Beltsville, MD, 20705, USA
SO Charge Field Eff. Biosyst.--3, [Int. Symp.], 3rd (1992), Meeting Date
1991, 243-62. Editor(s): Allen, Milton J. Publisher: Birkhaeuser, Boston,
Mass.
CODEN: 57VVAA
DT Conference; General Review
LA English

L7 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1991:158561 CAPLUS
DN 114:158561
TI Plant transformation by gene transfer into **pollen**
IN Saunders, James A.; Matthews, Benjamin F.
PA Agricultural Research Service, USA
SO U. S. Pat. Appl., 31 pp. Avail. NTIS Order No. PAT-APPL-7-530 485.
CODEN: XAXXAV
DT Patent
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 530485	A0	19901101	US 1990-530485	19900601
	US 5629183	A	19970513	US 1994-345869	19941128
PRAI	US 1989-350356		19890508		
	US 1990-530485		19900601		

L7 ANSWER 47 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1990:506266 BIOSIS
DN BR39:118262
TI THE DEVELOPMENT OF **POLLEN** TRANSFORMATION USING
ELECTROPORATION IN TOBACCO.
AU SAUNDERS J A; MATTHEWS B F
CS GERMPLASM QUALITY AND ENHANCEMENT LAB., USDA/ARS, BELTSVILLE, MD. 20705.
SO SYMPOSIUM ON MOLECULAR STRATEGIES FOR CROP IMPROVEMENT HELD AT THE 19TH
ANNUAL UCLA (UNIVERSITY OF CALIFORNIA-LOS ANGELES) SYMPOSIA ON MOLECULAR
AND CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, APRIL 16-22, 1990. J CELL
BIOCHEM SUPPL. (1990) 0 (14 PART E), 289.
CODEN: JCBSD7.
DT Conference
FS BR; OLD
LA English

L7 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1990:153098 CAPLUS
DN 112:153098
TI Plant transformation by gene transfer into **pollen**
IN Saunders, James A.; Matthew, Benjamin F.
PA United States Dept. of Agriculture, USA
SO U. S. Pat. Appl., 19 pp. Avail. NTIS Order No. PAT-APPL-7-350 356.
CODEN: XAXXAV

DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 350356	A0	19890915	US 1989-350356	19890508
	US 5629183	A	19970513	US 1994-345869	19941128
PRAI	US 1989-350356		19890508		
	US 1990-530485		19900601		

L7 ANSWER 56 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1988:50034 BIOSIS

DN BA85:26893

TI IN-VITRO ELECTROPORATION OF TOBACCO POLLEN.

AU MISHRA K P; JOSHUA D C; BHATIA C R

CS MOL. BIOL. DIV., BHABHA ATOMIC RES. CENTRE, TROMBAY, BOMBAY-400 085,
INDIA.

SO PLANT SCI (SHANNON), (1987) 52 (1-2), 135-140.

CODEN: PLSCE4. ISSN: 0168-9452.

FS BA; OLD

LA English

QK1 .P69

L7 ANSWER 57 OF 57 AGRICOLA

AN 1999:1598 AGRICOLA

DN IND21807761

TI Plant transformation by gene transfer into pollen.

AU Saunders, J.A.; Matthews, F.

SO [United States Department of Agriculture patents], 1 p

Publisher: [Washington, D.C.? : The Department, 1900?-

NTE Copies of USDA patents are available for a fee from the Commissioner of
Patents and Trademarks, U.S. Patent and Trademark Office, Washington, D.C.
20231.

Includes references

CY District of Columbia; United States

DT Article

FS USDA

LA English

=> d his

(FILE 'HOME' ENTERED AT 16:01:04 ON 15 OCT 2002)

FILE 'AGRICOLA, BIOSIS, CAPLUS, EMBASE' ENTERED AT 16:01:16 ON 15 OCT 2002
L1 3148 S MICROSPORE AND PLANT
L2 0 S L1 AND ELECROPORAT###
L3 136 S L1 AND TRANSFORM###
L4 82 DUP REM L3 (54 DUPLICATES REMOVED)
L5 7 S L4 AND ELECTRO?
L6 70 S POLLEN AND ELECTROPORAT?
L7 57 DUP REM L6 (13 DUPLICATES REMOVED)